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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/484,799	01/18/2000	Jeremy Barker	VT-1869	1118

27572 7590 11/28/2001

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EXAMINER
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CHANEY, CAROL DIANE

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 11/28/2001

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/484,799

Applicant(s)

BARKER ET AL.

Examiner

Carol Chaney

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 14 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 38-134 is/are pending in the application.
- 4a) Of the above claim(s) 38-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 42-134 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                    |

***Election/Restrictions***

Applicant's election with traverse of Group II, claims 1-37 in Paper No. 6, filed 9-14-01 is acknowledged. The traversal is on the ground(s) that both groups are related to lithium active materials for use in batteries, and the examination of the two groups would not present an undue burden. This is not found persuasive because the searches required for the two inventions are different, and the electrode active materials have different structures and different electrochemical properties, and thus different modes of operation, different functions, and different effects. Rejoining the two inventions would at least double the search required; clearly this would be an undue burden on the examiner. The requirement is still deemed proper and is therefore made FINAL.

Applicant alleges the election of species requirement made in the previous office action is improper. Since an election of species should not be required if the species claimed are considered clearly unpatentable (obvious) over each other, the election of species requirement has been withdrawn. The eighteen species listed in the previous office action are considered clearly unpatentable (obvious) over each other.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 42-55, 80-93, 95, 108-118 and 120 are rejected under 35 U.S.C. 102(a) as being anticipated by Kariru, JP 11-025983.

Kariru discloses lithium batteries including active materials having the formula  $\text{LiM}_{1-x}\text{Me}_x\text{PO}_4$  where M can be Co, Ni, or Mn and Me can be Mg, Fe, or Zn. (See abstract.) Thus, the claims are anticipated.

Claims 42-55 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Geismar et al., DE 40 24 409 A1.

Geismar et al. disclose the compounds  $\text{LiCu}_{0.99}\text{Zn}_{0.01}\text{PO}_4$  and  $\text{LiCo}_{0.99}\text{Zn}_{0.01}\text{PO}_4$ .

Thus, the claims are anticipated.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 56-79, 94, 96-107, 119, 121, and 134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kariru, JP 11-025983 A.

As discussed above, Kariru discloses applicants' invention essentially as claimed, with the exception that the specific species of the electroactive material  $\text{LiM}_{1-x}\text{Me}_x\text{PO}_4$  disclosed by Kariru are different from those recited by the applicants. However, as noted above, Kariru explicitly disclose some of the species claimed by the applicants. The species recited in applicants' claims 56-79, 94, 96-107, 119, 121, and 134 are considered clearly unpatentable (obvious) over those disclosed by Kariru.

Claims 56-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geismar et al., DE 40 24 409 A1.

As discussed above, Geismar disclose applicants invention essentially as claimed, with the exception that the specific species of the materials  $\text{LiM}_{1-x}\text{Me}_x\text{PO}_4$  disclosed by Geismar et al. are different from those recited by the applicants. However,

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as noted above, Geismar et al. disclose some of the species claimed by the applicants.

The species recited in applicants' claims 56-79 are considered clearly obvious over those disclosed by Geismar et al.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (703) 305-3777. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gabrielle Brouillette, may be reached at the telephone number (703) 308-0756. The official fax number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Carol Chaney  
Primary Examiner  
Art Unit 1745  
November 17, 2001